STATE ADMINISTRATION

Exhibit No. 2

Date 3-21-07

Bill No. HB-803

John Smart
125 Humbolt Loop
Helena, Montana 59601
406 442-1277
March 21, 2007

Documentation In Support of Testimony To Senate Committee on HB 803

Dear Committee Members:

I am testifying to the effect that I do not support HB 288 as written. While I see HB 803 as the beginning of awareness of the depleted uranium weapons health risks faced by Montanans serving in the military, the bill makes no meaningful improvements in the existing situation. I consider the current military attitudes and practices concerning the use of DU munitions in conflict to be irresponsible and dangerous to all involved. If this weapon is to be used in conventional warfare much more needs to be done in the way of predeployment training, avoidance of contamination in the field, medical treatment after any potential exposure and universal testing to all serving and returning from service or being discharged. In my testimony I will outline the limitations of HB 803 and suggest options. HB does nothing more than compile existing MBVA and MVAD guidelines and some protocol for current VA DU testing.

I short, HB 803 does not provide for mandatory predeployment training, or implementation of safe field procedures and protections, or for accurate and openly available or mandatory medical screening. of those who are serving or have served with potential exposure of any kind. There are many inter-related issues that I will explore in oral testimony.

The following are sources of scientific knowledge on the subject all of which are independent sources.

Extensive Rosalie Bertell Index:

http://www.iicph.org/srch.shtml

http://ccnr.org/du_hague.html

IDUST Compendium:

www.idust.net

http://www.idust.net/Compendium/Compendium.htm#TOP

http://www.idust.net/Compendium/ChapII.htm

Health Effects Of Depleted Uranium : Gretel Munroe

http://www.idust.net/Docs/HealthEffects01.htm

Also :
Including depleted uranium search engine research on: Asaf Durakovic, Doug Rokke, Leuren Moret

Montana Constitution:

Article 11, section 3 5.

"The people declare that Montana servicemen, servicewomen, and veterans be given special considerations determined by the Legislature."

MVAD Mission:

Establishment of a statewide network of service for discharged veterans and their families.

Provision of services and assistance for all Montana veterans and surviving spouses and dependents; in coordination with associated federal and state agencies, veterans7 services organizations, private organizations and individuals.

Management, operation and maintenance of Montana's state veterans' cemeteries.

Assist and advise the general public, governmental agencies, and elected officials regarding veterans
services, programs, initiatives and policy.

Montana Veterans' Affairs Division -

Budget 1 Economic Impact - For every $1 of state General Fund budget investment, MVAD veterans' services operations attains $117 in federal veterans' benefits compensation to Montana veterans.

2004 General Fund = $673,826 2005 Federal Veterans' Benefits = $78,899,681

I Millions of $ H Hundreds of Thousands of $ 1

Montana Veterans' Board and Montana Veterans' Affairs Division Audit:

http://www.leg.mt.gov/content/audit/download/02p-07.pdf

"Additional missions would require increases in resources".

" The quality of the working relationship with VA could be improved."

"Additional management information and communications equipment is needed to improve services to veterans." noted: a lack of telephone services and computers

"We recommend MVAD upgrade management information systems and communications equipment to improve veterans services." note: not done due to budget cuts

"Current process results in service inconsistencies."

A lack of quality control in claim processing

Undefined problems with travel expenses by the agency.
Services that vary in the rural regions where many recruits come from.

"MVAD is not in compliance with records management statutes"

2001 Montana Legislature

SENATE JOINT RESOLUTION NO. 5

INTRODUCED BY G. ROUSH

A JOINT RESOLUTION OF THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA REQUESTING A LEGISLATIVE STUDY OF CERTAIN VETERANS' ISSUES; URGING THE APPROPRIATE INTERIM COMMITTEE TO INCLUDE VETERANS' ORGANIZATIONS IN THE STUDY PROCESS; REQUESTING STAFF SUPPORT; AND REQUESTING A REPORT OF FINDINGS AND RECOMMENDATIONS.

WHEREAS, Montana is home to more than 100,000 veterans potentially eligible for federal benefits, which ranks Montana 10th in the number of veterans per capita; and

WHEREAS, resource allocation decisions limit the funding available to the U.S. Department of Veterans Affairs (VA) Montana health care system and require local administrators to set priorities; and

WHEREAS, the Montana Legislature appropriates public funds for programs that encompass services to Montana's veterans and also sets priorities; and

WHEREAS, some resource allocation decisions may inadvertently shift costs to other programs; and

WHEREAS, the Subcommittee on Military and Veterans' Affairs has found that veteran participation in discussions about fiscal and policy priorities is not only desirable for proper consideration of veterans' concerns but essential to bridging the gulf between service providers and veterans whose disabilities make it difficult for them to access those services; and

WHEREAS, the Subcommittee on Military and Veterans' Affairs has found that federal grant money may be available to help coordinate federal, state, and local services and to maximize the effective use of current resources; and

WHEREAS, the Subcommittee on Military and Veterans' Affairs has found that the release of VA medical records to the Federal Bureau of Investigation is a matter of concern; and

WHEREAS, twice as many veterans as nonveterans experience homelessness at some time during the course of a year and, because of complex and overlapping needs, a broader range of service coordination, advocacy, and intervention is required; and

WHEREAS, the Subcommittee on Military and Veterans' Affairs has found that an in-depth and systematic legislative examination of these issues is desirable.

NOW, THEREFORE, BE IT RESOLVED BY THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA:

That the Legislative Council be requested to designate an appropriate interim committee pursuant to section 5-5-217, MCA, to:

(1) identify how regional priorities are set and local resource allocation decisions are made by the U.S. Department of Veterans Affairs (VA) and the VA Montana health care system;

(2) consider the extent to which certain resource allocation decisions may shift costs and explore what actions could be taken to assess and mitigate unintended consequences;

(3) explore how the concerns of Montana's veterans can best be represented when fiscal and policy priorities are set;

(4) stay informed about whether veterans are being denied rights as a result of VA medical records being released to the Federal Bureau of Investigation;

(5) explore options for establishing a statewide homeless veterans' coordinator, a veterans' ombudsman, or other veterans' program to coordinate veteran-related services and identify the state agency under which the coordinator, ombudsman, or other program should be established;

(6) explore options for designing a grant program to capture available federal funds to support Montana's veterans' services;

(7) examine the state statutory definitions of "veteran" in context with more recent U.S. military operations, such as the peacekeeping mission in Kosovo; and

(8) study other emerging issues relevant to veterans' needs.

BE IT FURTHER RESOLVED, that in order to facilitate a broad-based study process, the interim committee be encouraged to seek out and welcome the participation of representatives of Congressionally chartered and recognized veterans' service organizations.

BE IT FURTHER RESOLVED, that the U.S. Department of Veterans Affairs, the Montana Veterans' Affairs Division, the Montana Department of Military Affairs, the Montana Department of Public Health and Human Services, and other appropriate public and private entities be urged to cooperate with and participate in this study process.

BE IT FURTHER RESOLVED, that the interim committee receive legislative staff support not only from the Legislative Services Division, but also from the Legislative Audit and Legislative Fiscal Divisions; that legislative staff be encouraged to interface with the staff of Montana's Congressional Delegation as appropriate; and that the interim committee report its findings, conclusions, and any recommended legislation to the 58th Legislature and to Montana's Congressional Delegation.

- END -

Quotes : Durakovic

" In a minute we'll be speaking with Dr. Asaf Durakovic. In 1991, Dr. Durakovic was Chief of Nuclear Medicine at the veterans' hospital in Wilmington Delaware. There he discovered the first gulf war veterans with symptoms of radiation exposure. The hospital terminated him after he refused to halt his research. He has pursued the research to this day. He was also a former US Army Colonel

" American professor of nuclear medicine Asaf Durakovic speaks at a conference of the Association of Nuclear Medicine pointing out that, according to his findings, depleted uranium is the main cause of the Gulf syndrome September 3, 2000. Durakovic said "that tens of thousands of British and American soldiers are dying from radiation from depleted uranium shells fired during the Gulf war. "

""As for the defense establishment's assertion that chemical exposure to DU was insignificant, Dr. Asaf Durakovic, who in 1991 was chief of the Nuclear Medicine Clinic at the Veterans Affairs hospital in Wilmington Delaware, discovered significant evidence of uranium exposure in his patients, severe pathology of the renal and geneto-urinary systems. After two of the Gulf War patients died, Dr. Durakovic insisted on expanding the tests. He wanted samples of the patients' skeletal systems. The tests were not performed, medical charts disappeared, the uranium Registry Office was dismantled, and Dr. Durakovic was laid off in 1997." (Dr. Durakovic is presently professor of radiology and nuclear medicine and radiology at Georgetown University.)"

"The [US government's] Veterans Administration asked me to lie about the risks of incorporating depleted uranium in the human body."

"These men were almost certainly exposed to radioactive weapons on the battlefield,"

"These are amazing results, especially since these soldiers were military police not exposed to the heat of battle," said Dr. Asaf Duracovic, who examined the G.I.s and performed the testing that was funded by The News.

"Other American soldiers who were in combat must have more depleted uranium exposure," said Duracovic, a colonel in the Army Reserves who served in the 1991 Persian Gulf War.

Prof. Asaf Durakovic, M.D., D.V.M., M.Sc., Ph.D., F.A.C.P
Professor of Radiology and Nuclear Medicine
Chief, Nuclear Medicine Service, VAMC Wilmington
Colonel, U.S. Army Medical Corps (R)

GAO REPORT STATES:

January 1993

"Operation Desert Storm: Army Not Adequately Prepared to Deal with Depleted Uranium Contamination,"

GAO REPORT: http://161.203.16.4/d36t11/148474.pdf

Doug Rokke, U.S. Army contractor who headed a clean-up of depleted uranium after the first Gulf War states:,

"Depleted uranium is a crime against God and humanity."

Rokke's own crew, a hundred employees, was devastated by exposure to the fine dust. He stated:

"When we went to the Gulf, we were all really healthy,"

After performing clean-up operations in the desert (mistakenly without protective gear), 30 members of his staff died, and most others"including Rokke himself"developed serious health problems. Rokke now has reactive airway disease, neurological damage, cataracts, and kidney problems.

"We warned the Department of Defense in 1991 after the Gulf War. Their arrogance is beyond comprehension."

Yet the D.O.D still insists such ingestion is "not sufficient to make troops seriously ill in most cases."

Then why did it make the clean up crew seriously or terminally ill in nearly all cases?

Rosalie Bertell Excerpts:

Uranium metal is autopyrophoric and can burn spontaneously at room temperature in the presence of air, oxygen and water. At temperatures of 200-400 degrees Centigrade, uranium powder may self-ignite in atmospheres of carbon dioxide and nitrogen. Oxidation of uranium under certain conditions may generate sufficient energy to cause an explosion (Gindler 1973). Friction caused by bullet or missile entry into a tank or armored car, for example, can cause the uranium to ignite, forming a concentrated ceramic aerosol capable of killing most personnel in the vehicle. Depleted uranium was used extensively in place of tungsten for ordnance by the US and UK in the Gulf War.

There is no dispute of the fact that at least 320 tons of depleted uranium (DU) was "lost" in the Gulf war, and that much of that was converted at high temperature into an aerosol, that is, minute insoluble particles of uranium oxide, UO2 or UO3 , in a mist or fog. It would have been impossible for ground troops to identify this exposure if or when it occurred in war, as this would require specialized detection equipment. However, veterans can identify situations in which they were likely to have been exposed to DU. Civilians working at military bases where live ammunition exercises are conducted may also have been exposed.

Uranium oxide and its aerosol form are insoluble in water. The aerosol resists gravity, and is able to travel tens of kilometres in air. Once on the ground, it can be resuspended when the sand is disturbed by motion or wind. Once breathed in, the very small particles of uranium oxide, those which are 2.5 microns [one micron = one millionth of a meter] or less in diameter, could reside in the lungs for years, slowly passing through the lung tissue into the blood. [Stradling et al 1988]

DU Inhalation:

"Exposure pathways for depleted uranium can be through the skin, by inhalation, and ingestion," writes Lauren Moret, another DU researcher. "Nano-particles have high mobility and can easily enter the body. Inhalation of nano-particles of depleted uranium is the most hazardous exposure, because the particles pass through the lung-blood barrier directly into the blood.

"When inhaled through the nose, nano-particles can cross the olfactory bulb directly into the brain through the blood brain barrier, where they migrate all through the brain," she wrote. "Many Gulf era

soldiers exposed to depleted uranium have been diagnosed with brain tumors, brain damage and impaired thought processes. Uranium can interfere with the mitochondria, which provide energy for the nerve processes, and transmittal of the nerve signal across synapses in the brain. " Leuren. Moret

---

McClain, a researcher at the US Armed Forces Radiobiology Research Institute reports conclusions from his research that "DU is mutagenic and transforms human osteoblastic cells into a tumorigenic phenotype. It alters neurophysiological parameters in rat hippocampus, crosses the placental barrier, and enters fetal tissue."

Summary

Uranium toxicity has been studied for many decades. The nephrotoxicity of uranium was recognized in the 19th century. Hodge (1) gives a good review of the history of uranium poisoning prior to the Manhattan Project. Other reviews of uranium toxicity in the decades following World War II, when the nuclear industry grew in those countries with nuclear capabilities, focus mostly on the kidney damage caused by uranium.

However, animal experiments have shown that inhaled uranium dioxide aerosols, such as those produced when DU is machined or when a DU weapon explodes and/or burns have a very long retention time in the lungs and slowly distribute DU throughout the body, coming to rest in bones, liver, kidney, heart, brain, spleen, lymph nodes and testicles. Tests on Gulf War veterans have shown measurable urinary DU even 10 years after their exposure, reinforcing the conclusions from the rat experiments. DU residing in the testicles may explain the observed teratogenic effects of DU exposure in which children of Gulf War veterans have a 50% greater risk of severe birth defects. DU-exposed rats have lower fertility, give rise to low birth weight offspring with a significantly higher rate of fetal skeletal malformations.The urine and blood tests of rats with embedded DU pellets or patches or injected DU solutions show dose and time-dependent mutagenic toxicity, and neurological disorders.

From: http://www.llrc.org/du/subtopic/faheyquotes.htm

Selected Quotes From Government Reports on Depleted Uranium
Assembled by Dan Fahey:

1. Pre-Desert Storm Reports:

"Aerosol DU exposures to soldiers on the battlefield could be significant with potential radiological and toxicological effects."
(Science Applications International Corporation (SAIC), Kinetic Energy Penetrator Environmental and Health Considerations, July 1990: Vol. 1, 4-5; included as Appendix D in US Army Armament, Munitions and Chemical Command report Kinetic Energy Penetrator Long Term Strategy Study, July 1990).

"Under combat conditions, the most exposed individuals are probably the ground troops that re-enter a battlefield following the exchange of armor-piercing munitions, either on foot or motorized transports."
(SAIC, July 1990, Vol. 2, 3-4).

"We are simply highlighting the potential for levels of [DU] exposure to military personnel during combat that would be unacceptable during peacetime operations."
(SAIC. July 1990, Vol. 1, 4-5).

"Following combats however, the condition of the baffiefteld, and the long-term health risks to natives and combat veterans may become issues in the acceptitbility of the continued use of DU kinetic energy penetrators for military applications."
(SAIC, July 1990, Vol. 2, 3-4).

Depleted uranium is a "low level alpha radiation emitter which is linked to cancer when exposures are internal, [and] chemical toxicity causing kidney damage."
(SAIC, July 1990, Vol. 1, 2-2).

"Short term effects of high doses can result in death, while long terrn effects of low doses have been implicated in cancer."
(SAIC, July 1990, Vol. 1, 4-12).

"Personnel in or near (less than approximately 50 meters) an armored vehicle at the time these vehicles were struck by depleted uranium munitions could receive significant internal DU exposures (i.e. those in excess of allowable standards)."
(Statement of Col. Eric Daxon, Radiation Protection Staff Officer. US Army Medical Command, summarizing the results of a December 1989 report from the Ballistic Research Laboratory, Radiological Contamination From Impacted Abrams Heavy Armor, Filszar. el. al.. Col. Daxon's statement was made in a July 19, 1996 letter to Dan Fahey, Swords to Plowshares).

"Our conclusions regarding the health and environmental acceptability of DU penetratois assume both controlled use and the presence of excellent health physics management practices. Combat conditions will lead to the uncontrolled release of DU. Individuals consulted have generally responded to this issue by saying it is irrelevant, or insignificant compared to the other risks of combat. However, environmental issues will arise if DU is used in combat." (SAIC, July 1990. Vol. 1, 4-5).

II. Post-Desert Storm Reports:

"There has been and continues to be a concern regarding the impact of DU on the environment. Therefore, if no one makes a case for the effectiveness of DU on the battlefield, DU rounds may become

politically unacceptable and thus, be deleted from the arsenal ... I believe we should keep this sensitive issue at mind when after action reports are written."
(Lt. Col. M.V. Ziehmn. Los Alamos National Laboratory memorandum. March 1, 1991).

"When DU is indicted as a causative agent for Desert Storm illness, the Army must have sufficient data to separate fiction from reality. Without forethought and data, the financial implications of long-term disability payments and health-care costs would be excessive."
(Lt. Army Environmental Policy Institute (AEPI), Health and Environmental Consequences or Depleted Uranium Use in the US Army: Technical Report, June 1995. P. 4).

"U.S. service personnel also could have been exposed to DU if they inhaled or ingested DU dust particles during incidental contact with vehicles destroyed by DU munitions, or if they lived or worked in areas contaminated with DU dust from accidental munitions fires. Thus, unnecessary exposure of many individuals could have occurred."
(Presidential Advisory Committee on GulrWar Veterans' Illnesses (PAC). Final Report, December 1996, p.99

"Army officials believe that DU protective methods can be ignored during battle and other life threatening situations because DU-related health risks are greatly outweighed by the risks of combat." (US General Accounting Office, Operation Desert Storm: Army Not Adequately Prepared to Deal With Depleted Uranium Contamination. GAO/NSIAD-93-90. Januarv 1993, p. 4).

"Soldiers may be incidentally exposed to DU from dust and smoke on the battlefield. The Army Surgeon General has determined that it is unlikely that these soldiers will receive a significant internal DU exposure. Medical follow-up is not warranted for soldiers who experience incidental exposure from dust or smoke." (AEPI. June 1995. p.102).

"Since DU weapons are openly available on the world arms market, DU weapons will be used in future conflicts ... The number of DU patients on future battlefields probably will be significantly higher because other countries will use systems containing DU."
(AEPI, June 1995. 119-120).

"DU is a low-level radioactive waste, and, therefore, must be disposed in a licensed repository." (AEPI. June 1995. P. 154).

"No international law, treaty, regulation, or custom requires the United States to remediate Persian Gulf War battlefields." (AEPI, June 1995. p. 154).

"Depleted uranium is more of a problem than we thought when it was developed. But it was developed according to standards and was thought through very carefully. It turned out, perhaps, to be wrong."
(Brent Scowcroft. former National Security Advisor to President Bush, from a British documentary titled "Riding the Storm." which aired on ITN TV. Ch. 4, in the United Kingdom. on January 3, 1996).

To obtain the reports and documents cited above. contact Dan Fahey at (415) 247-8777.

In February 1997 an exasperated Durakovic wrote to President Clinton on behalf of Gulf War veterans asking for an inquiry into DU contamination. Two months later he was fired from his job as Chief of Nuclear Medicine at the Department of Nuclear Medicine at the Veteran's Administration Authority in Wilmington, Delaware. Two of Durakovic's original 24 patients are now dead and 12 more are seriously ill. He warns that as many as 80,000 US soldiers may have been contaminated with DU.

Asaf Durakovic

The following letter was submitted to the United States department of Veterans Affairs by former Army doctor Asaf Durakovic:

February 11th, 1997

Dear President Clinton:

I am bringing to your attention the conspiracy against the Veterans of the United States.

In the Persian Gulf War some veterans were exposed to radioactive contamination with Depleted Uranium. I personally served in the Operation Desert Shield as a Unit Commander of 531 Army Medical Detachment. After the war I was in charge of Nuclear Medicine Service at Department of Veterans Affairs Medical Center in Wilmington, Delaware. A group of uranium contaminated US Veterans were referred to my attention as an expert in nuclear contamination. I properly referred them for the diagnostic tests to different Institutions dealing with transuranium elements. All of the records have been lost in this Hospital and in referring Institutions. Only a small part of information was recorded in Presidential Advisory Committee report on Gulf War Illnesses. Recently I received an order by the Chief of Staff of this Institution to start the veterans examinations again since all of the records have been lost.

Today I was informed in writing that my job was terminated as a reduction in force. I have been at this position for over eight years with an outstanding job performance and I am convinced with certainty that my elimination from the job is a direct result of my involvement in the management of Gulf War Veterans and discrimination for raising nuclear safety issues.

The lost records, lost laboratory specimens and retaliations which are well documented point to no less than conspiracy to terminate my efforts of proper management of Gulf War Veterans. I am sure that you will have an interest in this matter for the benefit of the veterans of The United States of America.

Most respectfully

(signed)

Asaf Durakovic, M.D., D.V.M., M.Sc., Ph.D., F.A.C.P

Professor of Radiology and Nuclear Medicine

Chief, Nuclear Medicine Service, VAMC Wilmington

Colonel, U.S. Army Medical Corps (R)

Prof. Asaf Durakovic, USA

DU Law New York State:

Perhaps the most effective DU bill in the country was passed last year in N.Y.

According to their bill and testimony from Dr. Doug Rokke over the years, it appears that our National Guard is in violation of it's own military regulations by not providing DU training.

" The legislature finds that Veterans Health Administration (VHA) Handbook outlines the policy and procedures evaluating Gulf War veterans, including those who served in Operation Iraqi Freedom, with possible exposure to depleted uranium. Army Regulation 700-48 prescribes policy and procedures for the management of equipment contaminated with depleted uranium or radioactive commodities. The regulation applies to the department of the army, U.S. Army Reserve and Army National Guard.

New York State Bill:

http://www.idust.net/States/NY-Initiative.htm#FinalBill

Final Bill sent to the Governor and signed into law November 10, 2006

STATE OF NEW YORK

LAWS OF NEW YORK, 2006

CHAPTER 743:

AN ACT to amend the executive law, in relation to assisting members and veterans in obtaining treatment services for exposure to toxic materials or harmful physical agents such as depleted uranium; to amend the public health law, in relation to providing information on harmful physical agents to veterans; and to establish a task force to study the effects of health problems due to military service such as the exposure to depleted uranium

Became a law November 10, 2006, with the approval of the Governor. Passed by a majority vote, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Legislative intent. The legislature finds that pre-deployment health assessments and post-deployment assessments and reassessments for evaluating Gulf War Veterans are required under Section 1074f of title 10, United States Code.

The legislature finds that Veterans Health Administration (VHA) Handbook outlines the policy and procedures evaluating Gulf War veterans, including those who served in Operation Iraqi Freedom, with possible exposure to depleted uranium. Army Regulation 700-48 prescribes policy and procedures for the management of equipment contaminated with depleted uranium or radioactive commodities. The regulation applies to the department of the army, U.S. Army Reserve and Army National Guard.

The legislature finds that many veterans who have served in the Persian Gulf area since the 1990s have been experiencing health problems.

The legislature hereby declares that an examination of the medical issues and exposure of troops to toxic materials or harmful physical agents such as depleted uranium should be explored.

The legislature also declares that assisting troops who are members of the New York Army National Guard and New York Air National Guard who have been federalized and sent to combat theater areas or combat zones and have returned home to New York state is warranted.

§ 2. The executive law is amended by adding a new section 366 to read as follows:

§ 366. Veterans health screening. 1. As used in this section: a. "Eligible member" means a member of the New York army national guard or the New York air national guard who served in the Persian Gulf War, as defined in 38 USC 101, or in an area designated as a combat zone by the president of the United States during Operation Enduring Freedom or Operation Iraqi Freedom;

b. "Veteran" means a person, male or female, resident of this state, who has served in the active military, naval or air service of the United States during a time of war in which the United States engaged and who has been released from such service otherwise than by dishonorable discharge, or who has been furloughed to the reserve;

EXPLANATION--Matter in italics is new; matter in brackets [ ] is old law to be omitted.

c. "Military physician" includes a physician who is under contract with the United States department of defense to provide physician services to members of the armed forces; and

d. "Depleted uranium" means uranium containing less uranium-235 than the naturally occurring distribution of uranium isotopes.

2. On and after February first, two thousand seven, the adjutant general and the state director shall assist any eligible member or veteran who has been experiencing health problems. Such problems may include exposure to toxic materials or harmful physical agents such as depleted uranium. An eligible member or veteran who has been assigned a risk level I, II or III for depleted uranium exposure by his or her branch of service, is referred by a military physician, or has reason to believe that he or she was exposed to toxic materials or harmful physical agents such as depleted uranium during such service, in obtaining

federal treatment services. Such treatment shall include, but not be limited to, a best practice health screening test for exposure to depleted uranium using a bioassay procedure involving sensitive methods capable of detecting depleted uranium at low levels and the use of equipment with the capacity to discriminate between different radioisotopes in naturally occurring levels of uranium and the characteristic ratio and marker for depleted uranium. As more scientific reliable tests become available such test shall be included in the treatment protocol. No state funds shall be used to pay for such tests or such other federal treatment services.

3. On or before February first, two thousand seven, the adjutant general shall submit a report to the chair of the senate veterans, homeland security and military affairs committee and the chair of the assembly veterans' affairs committee on the scope and adequacy of training received by members of the New York army national guard and the New York air national guard on detecting whether their service as eligible members is likely to entail, or to have entailed, exposure to toxic materials or harmful physical agents such as depleted uranium. The report shall include an assessment of the feasibility and cost of adding predeployment training concerning potential exposure to depleted uranium and other toxic chemical substances and the precautions recommended under combat and noncombat conditions while in a combat theater or combat zone of operations.

§ 3. Section 3803 of the public health law, as added by chapter 106 of the laws of 2003, is amended to read as follows:

§ 3803. Veterans health care information program. 1. There is hereby created within the department the veterans health care information program (referred to in this section as the "program"), which shall provide information on health issues associated with military duty, including but not limited to Agent Orange, Gulf War [Syndrome] Syndromes, toxic materials or harmful physical agents such as, depleted uranium, and hepatitis C, for veterans, their surviving spouses and health care providers.

2. The program shall include but not be limited to the following elements:

(a) public service announcements; [and]

(b) establishment of a toll-free telephone hotline to provide information regarding health care providers and treatment centers with expertise in illnesses associated with military duty; and

(c) establish a veterans health information clearing house on-line.

3. In exercising any of his or her powers under this section, the commissioner shall consult with appropriate health care professionals,

providers, veterans or organizations representing them, the division of veterans' affairs [and], the federal department of veterans' affairs and the United States defense department.

4. The commissioner may make rules and regulations necessary and appropriate for the implementation of this section.

§ 4. (a) There is hereby established a task force on health problems due to military service to study the health effects of exposure to toxic materials or harmful physical agents such as depleted uranium, as they

relate to military service. The task force shall, within available appropriations and with the approval of the temporary president of the senate and the speaker of the assembly, and subject to the provisions of this section:

(1) commission a study to consider the health of service members who have been exposed to toxic materials or harmful physical agents, such as depleted uranium since August 2, 1990, and conduct a scientific conference on such health effects;

(2) develop in conjunction with the department of health, state director of veterans' affairs and the adjutant general a health registry for veterans and military personnel returning from Afghanistan, Iraq and other countries in which exposure to toxic materials or harmful physical agents such as depleted uranium may be found;

(3) develop a plan for outreach to and follow-up of military personnel and veterans in consultation with the division of veterans' affairs and the adjutant general;

(4) prepare a report for service members and veterans concerning potential exposure to toxic materials or harmful physical agents such as depleted uranium and the precautions recommended under combat and non-combat conditions while in a combat theater or combat zone; and

(5) make any other recommendations the task force considers appropriate.

(b) The task force shall consist of eleven members to be appointed as follows: five members to be appointed by the governor, two members to be appointed by the temporary president of the senate, one member to be appointed by the minority leader of the senate, two members to be appointed by the speaker of the assembly and one member to be appointed by the minority leader of the assembly. Of such appointments:

(1) two members who are veterans with knowledge of or experience with exposure to toxic materials or harmful physical agents such as depleted uranium appointed, one each, by the temporary president of the senate and the speaker of the assembly; and

(2) four members who are physicians or scientists with knowledge of or experience in the detection or health effects to exposure to toxic materials or harmful physical agents such as depleted uranium appointed, one each, by the temporary president of the senate, the speaker of the assembly, the minority leader of the senate and the minority leader of the assembly;

(3) in addition to the foregoing appointed members, the following state officers, or their designees, shall serve as ex-officio members of the task force:

(i) the state director of veterans' affairs;

(ii) the commissioner of the department of health; and

(iii) the adjutant general.

(c) The person retained to conduct the study under subdivision (a) of this section shall, prior to being retained, disclose to the appointing authority any research done by such person (1) on any matters related to exposure to toxic materials or harmful physical agents such as depleted

uranium, or (2) that was funded by an entity that is engaged in manufacturing processes that use toxic materials or harmful physical agents

such as depleted uranium.

(d) All appointments to the task force shall be made no later than thirty days after the effective date of this act. Any vacancy shall be filled by the appointing authority.

(e) No appointed member shall be a member of the executive, legislative, or judicial branch of the state government at the time of his or her appointment.

(f) The temporary president of the senate and the speaker of the assembly shall appoint chairpersons of the task force among the members appointed under subdivision (b) of this section. The chairpersons shall schedule the first meeting of the task force, which shall be held no later than sixty days after the effective date of this act.

(g) The members of the task force shall receive no compensation for their service, but members who are not state officials shall be reimbursed for their actual and necessary expenses, including travel expenses, incurred in the performance of their duties. State officials and employees shall be entitled to such reimbursement for actual and necessary expenses incurred in the performance of their duties as task force members as otherwise provided by law or rules and regulations.

(h) The task force shall issue and submit a report on its findings and recommendations to the chair of the senate veterans, homeland security and military affairs committee and the chair of the assembly veterans' affairs committee. Such report shall be transmitted to the governor, temporary president of the senate and the speaker of the assembly. The report shall be filed no later than thirty days after the completion of the responsibilities set forth by subdivision a of this section.

§ 5. This act shall take effect immediately, provided, however, that the task force established pursuant to section four of this act shall expire and be terminated on the first day next succeeding the date of the submission of its report as provided in section four of this act and; provided further, however, that the chairpersons of the task force shall notify the legislative bill drafting commission upon the submission of its report as provided for in section four of this act in order that the commission may maintain an accurate and timely effective data base of the official text of the laws of the state of New York in furtherance of effecting the provisions of section 44 of the legislative law and section 70-b of the public officers law.

The Legislature of the STATE OF NEW YORK ss:

Pursuant to the authority vested in us by section 70-b of the Public Officers Law, we hereby jointly certify that this slip copy of this session law was printed under our direction and, in accordance with such section, is entitled to be read into evidence.

JOSEPH L. BRUNO	SHELDON SILVER
Temporary President of the Senate	Speaker of the Assembly

http://www.wise-uranium.org/diss.html#CHROMSCHOTT

Chromosome aberrations found in Gulf and Balkans Wars' veterans
Gulf veteran babies 'risk deformities' :

Children of British soldiers who fought in wars in which depleted uranium ammunition was used are at greater risk of suffering genetic diseases passed on by their fathers, new research reveals.

Veterans of the conflicts in the Gulf, Bosnia and Kosovo have been found to have up to 14 times the usual level of chromosome abnormalities in their genes. That has raised fears they will pass cancers and genetic illnesses to their offspring. The study is the first to analyse chromosome deformation in soldiers.
'High levels of genetic damage do not occur naturally. It increases the probability of cancer, deformed babies and other genetic conditions significantly,' said Professor Albrecht Schott, a German biochemist who co-ordinated the research.

Schott collected blood samples from 16 British veterans last year. Fourteen had fought in the Gulf war, one of whom also served in Bosnia. Of the others, one served only in Kosovo and one only in Bosnia. Two of the veterans are women. The former soldiers have between double and 14 times the usual level of chromosome abnormalities. The average was five-and-a-half times higher than found in civilians. None had less than double the normal rate.

A spokesman for the MoD dismissed Schott's findings. 'We consider the tests neither well thought out nor scientifically sound,' he said.

Last month the MoD said it was launching an investigation after a study revealed 19 Gulf veterans had developed lymphatic or bone marrow cancers compared with 11 in a control group. (The Observer August 11, 2002)

Eight British veterans of the conflicts in the Gulf, Bosnia and Kosovo have high levels of deformed chromosomes, increasing the risks of cancers and abnormalities in their children. Six of the men saw action in the Gulf, and one of this six also served in Bosnia. Of the remaining two, one served only in Kosovo and one only in Bosnia.

Initial results of the study, investigating chromosome deformation in white blood cells of the soldiers, reveals genetic damage in the group at least 10 times greater than that found in the general population. Professor Albrecht Schott, a retired chemist who worked at the Free University of Berlin until recently, is co-ordinating the research. His results will be published early in 2002. (The Express (UK) December 24, 2001)

The results of the study were published in March 2003:

From: http://www.epidem.com/pt/re/epidemiology/fulltext.00001648-200407000-00180.htm;jsessionid=FJXJ7Lrdq7p94J4qTph4t3pWdXktggwD4zGQW7XLsPNg9pT2mhMv!736553971!-949856145180911-1

Complete abstract :

Epidemiology: Volume 15(4) July 2004 p S73
CHROMOSOME ABERRATION ANALYSIS IN PERIPHERAL LYMPHOCYTES OF GULF WAR AND BALKANS WAR VETERANS
[The Sixteenth Conference of the International Society for Environmental Epidemiology (ISEE): Abstracts]
Schroeder, Heike*; Heimers, Anna*; Hoffmann, Wolfgang†; Frentzel-Beyme, Rainer*
*University of Bremen, Germany; †University of Greifswald, Germany

The authors wish to thank the British National Gulf Veterans' and Families' Association for cooperation and for support by grants from the World Depleted Uranium Center, Berlin, Germany (WoDUC), as well as its director Prof. Albrecht Schott, for scientific advice.

Abstract:
British veterans of the Gulf War 1990/1991 or/and the Balkans Wars 1995/1996 and 1999 who suffered from various medical complaints since then volunteered to participate in the present pilot-study. All reported situations during their active service associated with exposure to depleted uranium by inhalation of uranium oxide in its aerosol form. Exclusion criteria were previous radiation, medical use of cytotoxic drugs, heavy smoking, and previous work in badge-monitored occupations. An appropriate control group with respect to all of the multiple warfare agents the investigated veterans had been exposed to (including multi-vaccinations) and ill with comparable complaints, but documented absence of DU contamination, was not available, our own laboratory control was chosen to evaluate the findings of the study. Average ages were 40.1 (29 - 57) and 35.1 (17 - 57), resp.

There was a 5.2-fold increase among the exposed compared to the control ($p<0.001$).

Among the volunteers no sample was without chromosomal aberrations.

Frequencies of dicentric and ring chromosomes in 8 from 16 cases differ significantly in individual contrasts (Fisher's exact test: $p<.05$). Stratification according to deployment did not alter the results.

Major bias in the chromosomal analysis seems unlikely since all volunteers and controls were analysed blindly by the same experienced scorers.

Veterans were exposed besides DU-dust to different agents on the battlefields. However, since dicentric chromosomes are reliable indicators of ionizing radiation, these findings contradict official releases from IAEA, WHO, MOD and DOE, stating that the radiotoxicity of DU would be negligible.

Computer simulations have also calculated only little radiological risk associated with the use of DU weapons, hence, it can only be speculated about the mechanisms behind the observed cytogenetic effects, considering the relatively low specific radioactivity of DU. Modern air sampling techniques have shown hundreds of thousands of DU particles in two selected samples from Kosovo in a few milligrams of contaminated soil, indicating that two years after the end of the war spots at different sites hit by DU rounds remain and DU dust was widely dispersed into the environment, since it was discovered even in Hungary.

The environmental impact of DU dust has been pondered, our results indicating persistence of uranium in the organism, which was confirmed by animal experimental evidence.

DU and DNA:

http://www.scienceagogo.com/news/20060307010324data_trunc_sys.shtml

URANIUM'S EFFECT ON DNA ESTABLISHED -- THIS INCLUDES

DEPLETED URANIUM -- NEW RESEARCH FROM

NORTHERN ARIZONA UNIVERSITY

7 April 2006

Uranium's Effect On DNA Established

The use of depleted uranium in munitions and weaponry is likely to come under intense scrutiny now that new research that found that uranium can bind to human DNA. The finding will likely have far-reaching implications for returned soldiers, civilians living in what were once war-zones and people who might live near uranium mines or processing facilities.

Uranium - when manifested as a radioactive metal - has profound and debilitating effects on human DNA. These radioactive effects have been well understood for decades, but there has been considerable debate and little agreement concerning the possible health risks associated with low-grade uranium ore (yellowcake) and depleted uranium.

Now however, Northern Arizona University biochemist Diane Stearns has established that when cells are exposed to uranium, the uranium binds to DNA and the cells acquire mutations, triggering a whole slew of protein replication errors, some of which can lead to various cancers. Stearns' research, published in the journals Mutagenesis and Molecular Carcinogenesis, confirms what many have suspected for some time - that uranium can damage DNA as a heavy metal, independently of its radioactive properties. "Essentially, if you get a heavy metal stuck on DNA, you can get a mutation," Stearns explained. While other heavy metals are known to bind to DNA, Stearns and her team were the first to identify this characteristic with uranium.

Depleted uranium - what is left over when the highly radioactive isotopes of uranium are removed - is widely used by the military. Anti-tank weapons, tank armor and ammunition rounds are just some of the applications. "The health effects of uranium really haven't been studied since the Manhattan Project (the development of the atomic bomb in the early 1940s). But now there is more interest in the health effects of depleted uranium. People are asking questions now," Stearns said.

Her research may shed light on the possible connection between exposure to depleted uranium and Gulf War Syndrome, or to increased cancers and birth defects in the Middle East and Balkans. And closer to home, questions continue to be asked about environmental exposure to uranium from mine tailings; heavily concentrated around Native American communities. "When the uranium mining boom crashed in the '80s, there wasn't much cleanup," Stearns said. Estimates put the number of abandoned mines on the Navajo Nation in Arizona at more than 1,100.

Source: Northern Arizona University